

Prof. Dr. habil. Andreas Erb

Publication list as of Nov. 2023:

- 246) 17O enrichment of CaWO₄ crystals for spin-dependent DM search**
Angelina Kinast, Andreas Erb, Stefan Schönert, Raimund Strauss, Jürgen Haase
arXiv:2311.0316, submitted to Proceedings of Science
- 245) Light Dark Matter Search Using a Diamond Cryogenic Detector**
CRESST Collaboration, G. Angloher, S. Banik, G. Benato, A. Bento, A. Bertolini, R. Breier, C. Bucci, J. Burkhart, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, S. Fichtinger, D. Fuchs, A. Garai, V. M. Ghete, P. Gorla, P. V. Guillaumon, S. Gupta, D. Hauff, M. Jeřkovský, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, S. Kuckuk, A. Langenkämper, M. Mancuso, L. Marini, B. Mauri, L. Meyer, V. Mokina, M. Olmi, T. Ortmann, C. Pagliarone, L. Pattavina, F. Petricca¹, W. Potzel, P. Povinec, F. Pröbst, F. Pucci, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, V. Zema
arXiv:2310.05815
- 244) Single-crystalline YIG nanoflakes with uniaxial in-plane anisotropy and diverse crystallographic orientations**
Roman Hartmann, Seema, Ivan Soldatov, Michael Lammel, Daphné Lignon, Xianyue Ai, Gillian Kiliani, Rudolf Schäfer, Andreas Erb, Rudolf Gross, Johannes Boneberg, Martina Müller, Sebastian T. B. Goennenwein, Elke Scheer, Angelo Di Bernardo
arXiv:2309.12477
- 243) High-Dimensional Bayesian Likelihood Normalisation for CRESST's Background Model**
G. Angloher, S. Banik, G. Benato, A. Bento, A. Bertolini, R. Breier, C. Bucci, J. Burkhart, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, S. Fichtinger, D. Fuchs, A. Garai, V. M. Ghete, P. Gorla, P. V. Guillaumon, S. Gupta, D. Hauff, M. Jeskovsky, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, S. Kuckuk, A. Langenkämper, M. Mancuso, L. Marini,¹¹ B. Mauri, L. Meyer, V. Mokina, M. Olmi, T. Ortmann, C. Pagliarone, L. Pattavina, F. Petricca¹, W. Potzel, P. Povinec, F. Pröbst, F. Pucci, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, V. Zema
arXiv:2307.12991

- 242) Observation of a low energy nuclear recoil peak in the neutron calibration data of the CRESST-III Experiment**
 G. Angloher, S. Banik, G. Benato, A. Bento, A. Bertolini, R. Breier, C. Bucci, J. Burkhart, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, S. Fichtinger, D. Fuchs, A. Garai, V. M. Ghete, P. Gorla, P. V. Guillaumon, S. Gupta, D. Hauff, M. Jeskovsky, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, S. Kuckuk, A. Langenkämper, M. Mancuso, L. Marini, B. Mauri, L. Meyer, V. Mokina, M. Olmi, T. Ortmann, C. Pagliarone, L. Pattavina, F. Petricca, W. Potzel, P. Povinec, F. Pröbst, F. Pucci, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, V. Zema
 arXiv:2303.15315, Phys. Rev. D 108, 022005 (2023)
- 241) Results on sub-GeV Dark Matter from a 10 eV Threshold CRESST-III Silicon Detector**
 CRESST Collaboration, G. Angloher, S. Banik, G. Benato, A. Bento, A. Bertolini, R. Breier, C. Bucci, J. Burkhart, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, S. Fichtinger, D. Fuchs, A. Fuss, A. Garai, V. M. Ghete, S. Gerster, P. Gorla, P. V. Guillaumon, S. Gupta, D. Hauff, M. Ješkovský, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, L. Marini, L. Meyer, V. Mokina, A. Nilima, M. Olmi, T. Ortmann, C. Pagliarone, L. Pattavina, F. Petricca, W. Potzel, P. Povinec, F. Pröbst, F. Pucci, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, D. Schmiedmayer, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, and V. Zemaet
 Phys. Rev. D 107, 122003 (2023)
- 240) Secular Equilibrium Assessment in a CaWO₄ Target Crystal from the Dark Matter Experiment CRESST using Bayesian Likelihood Normalisation**
 G. Angloher, S. Banik, G. Benato, A. Bento, A. Bertolini, R. Breier, C. Bucci, J. Burkhart, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, S. Fichtinger, D. Fuchs, A. Fuss, A. Garai, V. M. Ghete, P. Gorla, S. Gupta, D. Hauff, M. Ješkovský, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, L. Marinid., V. Mokinab, A. Nilimaa, M. Olmid, T. Ortmann, C. Pagliaroned, L. Pattavinad, F. Petricca, W. Potzel, P. Povinec, F. Pröbsta, F. Pucci, F. Reindl, J. Rothe, K. Schäffner, J. Schieckb, D. Schmiedmayer, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, V. Zema,
 Applied Radiation and Isotopes, 194 (2023) 110670
- 239) Probing superconducting order in overdoped CaxY_{1-x}Ba₂Cu₃O₇ by neutron diffraction measurements of the vortex lattice**
 A. S. Cameron, E. Campillo, A. Alshemi, M. Bartkowiak, L. Shen, H. Kawano-Furukawa, A. T. Holmes, O. Prokhnenko, A. Gazizulina, J. S. White, R. Cubitt, N. -J. Steinke, C. D. Dewhurst, A. Erb, E. M. Forgan, E. Blackburn
 Physical Review B 108, No. 14 (2023), DOI: 10.1103/PhysRevB.108.144511

- 238) Towards an automated data cleaning with deep learning in CRESST**
G. Angloher, S. Banik, D. Bartolot, G. Benato, A. Bento, A. Bertolini, R. Breier, C. Bucci, J. Burkhart, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, N. Ferreira Iachellini, S. Fichtinger, D. Fuchs, A. Fuss, A. Garai, V. M. Ghete, S. Gerster, P. Gorla, P. V. Guillaumon, S. Gupta, D. Hauff, M. Jeřkovský, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, M. Lackner, A. Langenkämper, M. Mancuso, L. Marini, L. Meyer, V. Mokina, A. Nilima, M. Olmi, T. Ortmann, C. Pagliarone, L. Pattavina, F. Petricca, W. Potzel, P. Povinec, F. Pröbst, F. Pucci, F. Reindl, D. Rizvanovic, J. Rothe, K. Schäffner, J. Schieck, D. Schmiedmayer, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, V. Zema, W. Waltenberger & CRESST
Eur. Phys. J. Plus 138, 100 (2023)
- 237) How pressure enhances the critical temperature for high temperature superconductivity in YBa₂Cu₃O_{6+y}**
Michael Jurkutat, Carsten Kattinger, Stefan Tsankov, Richard Reznicek, Andreas Erb, Jürgen Haase
PNAS (Proceedings of the National Academy of Sciences of the United States of America) **120**, e2215458120 (2023)
- 236) Magnetoelastic resonance as a probe for exchange springs at antiferromagnet-ferromagnet interfaces**
K. M. Seemann, O. Gomonay, Y. Mokrousov, A. Hörner, S. Valencia, P. Klamser, F. Kronast, A. Erb, A. T. Hindmarch, A. Wixforth, C. H. Marrows, P. Fischer
Physical Review B 105, 144432 (2022)
- 235) Probing spin-dependent dark matter interactions with ⁶Li**
G. Angloher, G. Benato, A. Bento, E. Bertoldo, A. Bertolini, R. Breier, C. Bucci, L. Canonica, A. D'Addabbo, S. Di Lorenzo, L. Einfalt, A. Erb, F. v. Feilitzsch, N. Ferreira Iachellini, S. Fichtinger, D. Fuchs, A. Fuss, A. Garai, V. M. Ghete, P. Gorla, S. Gupta, D. Hauff, M. Jeřkovský, J. Jochum, M. Kaznacheeva, A. Kinast, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, L. Marini, V. Mokina, A. Nilima, M. Olmi, T. Ortmann, C. Pagliarone, V. Palušová, L. Pattavina, F. Petricca, W. Potzel, P. Povinec, F. Pröbst, F. Pucci, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, D. Schmiedmayer, S. Schönert, C. Schwertner, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, I. Usherov, F. Wagner, M. Willers, V. Zema
The European Physical Journal C 82, 207 (2022)
- 234) Deviations from the extended London model at high magnetic fields in YBa₂Cu₃O₇**
E. Campillo, M. Bartkowiak, R. Riyat, E. Jellyman, A. S. Cameron, A. T. Holmes, O. Prokhnenko, W.-D. Stein, A. Erb, E. M. Forgan, and E. Blackburn
Physical Review B 105, 184508 (2022)
- 233) Twenty-three millisecond electron spin coherence of erbium ions in a natural-abundance crystal**
Marianne Le Dantec, Miloř Rančić, Sen Lin, Eric Billaud, Vishal Ranjan, Daniel Flanigan, Sylvain Bertaina, Thierry Chanelière, Philippe Goldner, Andreas Erb, Ren Bao Liu, Daniel Estève, Denis Vion, Emmanuel Flurin, Patrice Bertet
Science Advances • 15 Dec 2021 • Vol 7, Issue 51 • [DOI: 10.1126/sciadv.abj9786](https://doi.org/10.1126/sciadv.abj9786)

- 232) Lithium-Containing Crystals for Light Dark Matter Search Experiments**
E. Bertoldo, A. H. Abdelhameed et al. (The CRESST Collaboration)
Journal of Low Temperature Physics 199, 510-518 (2020)
- 231) Moissanite anvil cell single crystal NMR at pressures of up to 4.4 GPa**
Carsten Kattinger, Robin Guehne, Stefan Tsankov, Michael Jurkutat, Andreas Erb, Juergen Haase
Review of Scientific Instruments **92**, 113901 (2021)
doi.org/10.1063/5.0065736
- 230) Superconductor-Insulator Transition in space charge doped one unit cell Bi₂Sr_{1.9}CaCu₂O_{8+x}**
Fang Wang, Johan Biscaras, Andreas Erb and Abhay Shukla
Nature Communications **12**, 2926 (2021)
- 229) Temperature independent cuprate pseudogap from planar oxygen NMR**
Jakob Nachtigal, Marija Avramovska, Andreas Erb, Danica Pavićević, Robin Guehne, Jürgen Haase
Condens. Matter 5 (2020) 66 [arXiv:2009.09492](https://arxiv.org/abs/2009.09492) doi:[10.3390/condmat5040066](https://doi.org/10.3390/condmat5040066)
- 228) Cryogenic characterization of a LiAlO₂ crystal and new results on spin-dependent dark matter interactions with ordinary matter**
A. H. Abdelhameed, G. Angloher, P. Bauer, A. Bento, E. Bertoldo, R. Breier, C. Bucci, L. Canonica, A. D'Addabbo, S. Di Lorenzo, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, S. Fichtinger, D. Fuchs, A. Fuss, V. M. Ghete, A. Garai, P. Gorla, D. Hauff, M. Ješkovský, J. Jochum, J. Kaizer, M. Kaznacheeva, A. Kinast, et al. (34 additional authors not shown)
Eur.Phys.J. C80 (2020) no.9, 834 doi [10.1140/epjc/s10052-020-8329-4](https://doi.org/10.1140/epjc/s10052-020-8329-4)
- 227) Crossover to strange metal phase: quantum criticality in one unit cell Bi₂Sr₂CaCu₂O_{8+x}**
Edoardo Sterpetti, Johan Biscaras, Andreas Erb and Abhay Shukla
J. Phys.: Condens. Matter 32 (2020) 045601 <https://doi.org/10.1088/1361-648X/ab4b21>
- 226) Tc and Other Cuprate Properties in Relation to Planar Charges as Measured by NMR**
Michael Jurkutat, Andreas Erb and Jürgen Haase
Condens. Matter (2019) 4, 67; doi:[10.3390/condmat4030067](https://doi.org/10.3390/condmat4030067)
- 225) Experimental evidence for Zeeman spin-orbit coupling in layered antiferromagnetic conductors**
R. Ramazashvili, P. D. Grigoriev, T. Helm, F. Kollmannsberger, M. Kunz, W. Biberacher, E. Kampert, H. Fujiwara, A. Erb, J. Wosnitza, R. Gross, M. V. Kartsovnik
npj Quantum Materials **6**, 11 (2021)

- 224) Description of CRESST-III Data**
CRESST Collaboration, A. H. Abdelhameed, G. Angloher, P. Bauer, A. Bento, E. Bertoldo, C. Bucci, L. Canonica, A. D'Addabbo, X. Defay, S. Di Lorenzo, A. Erb, F. v. Feilitzsch, S. Fichtinger, N. Ferreiro Iachellini, A. Fuss, P. Gorla, D. Hauff, J. Jochum, A. Kinast, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, V. Mokina, et al.
arXiv:1905.07335
- 223) Acceptance region efficiency files now starting at 30eV and with increased granularity** First results from the CRESST-III low-mass dark matter program
CRESST Collaboration, A. H. Abdelhameed, G. Angloher, P. Bauer, A. Bento, E. Bertoldo, C. Bucci, L. Canonica, A. D'Addabbo, X. Defay, S. Di Lorenzo, A. Erb, F. v. Feilitzsch, S. Fichtinger, N. Ferreiro Iachellini, A. Fuss, P. Gorla, D. Hauff, J. Jochum, A. Kinast, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, V. Mokina, et al.
arXiv:1904.00498
- 222) First results on sub-GeV spin-dependent dark matter interactions with 7 Li**
H. Abdelhameed, G. Angloher, P. Bauer, A. Bento, E. Bertoldo, C. Bucci, L. Canonica, A. D'Addabbo, X. Defay, S. Di Lorenzo, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, S. Fichtinger, A. Fuss, P. Gorla, D. Hauff, J. Jochum, A. Kinast, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, V. Mokina, E. Mondragon, et al.
Eur. Phys. J. C (2019) 79: 630. <https://doi.org/10.1140/epjc/s10052-019-7126-4>
arXiv:1902.07587
- 221) Emergence of pseudogap from short-range spin-correlations in electron doped cuprates**
F. Boschini, M. Zonno, E. Razzoli, R. P. Day, M. Michiardi, B. Zwartsenberg, P. Nigge, M. Schneider, E. H. da Silva Neto, A. Erb, S. Zhdanovich, A. K. Mills, G. Levy, C. Giannetti, D. J. Jones, A. Damascelli
npj Quantum Materials 5, 6 (2020)
- 220) Limits on Dark Matter Effective Field Theory Parameters with CRESST-II**
G. Angloher, P. Bauer, A. Bento, E. Bertoldo, C. Bucci, L. Canonica, A. D'Addabbo, X. Defay, S. Di Lorenzo, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, A. Langenkämper, M. Mancuso, V. Mokina, E. Mondragon, V. Morgalyuk, A. Münster, M. Olmi, et al.
Eur. Phys. J. C (2019) 79: 43.
<https://doi.org/10.1140/epjc/s10052-018-6523-4> arXiv:1809.03753
- 219) Exchange-enhanced Ultrastrong Magnon-Magnon Coupling in a Compensated Ferrimagnet**
Lukas Liensberger, Akashdeep Kamra, Hannes Maier-Flaig, Stephan Geprägs, Andreas Erb, Sebastian T. B. Goennenwein, Rudolf Gross, Wolfgang Belzig, Hans Huebl, Mathias Weiler
Phys. Rev. Lett. 123, 117204 (2019), [arXiv:1903.04330](https://arxiv.org/abs/1903.04330),
doi [10.1103/PhysRevLett.123.117204](https://doi.org/10.1103/PhysRevLett.123.117204)

- 218) A prototype detector for the CRESST-III low-mass dark matter search**
R. Strauss, G. Angloher, P. Bauer, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, R. Hampf, D. Hauff, M. Kiefer, J. -C. Lanfranchi, A. Langenkämper, E. Mondragon, A. Münster, C. Oppenheimer, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, J. Rothe, S. Schönert, W. Seidel, H. Steiger, L. Stodolsky, A. Tanzke, et al.
arXiv:1802.08639 doi [10.1016/j.nima.2016.06.060](https://doi.org/10.1016/j.nima.2016.06.060)
- 217) Comprehensive phase diagram of two-dimensional space charge doped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$**
Edoardo Sterpetti, Johan Biscaras, Andreas Erb & Abhay Shukla
NATURE COMMUNICATIONS | DOI: 10.1038/s41467-017-02104-z
- 216) Magnetotransport evidence of irreversible spin reorientation in the collinear antiferromagnetic state of underdoped $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_4$**
Alma Dorantes, Ahmed Alshemi, Zengle Huang, Andreas Erb, Mark Kartsovnik
Phys. Rev. B 97, 054430 (2018) arXiv:1711.09033
- 215) First results on low-mass dark matter from the CRESST-III experiment**
CRESST collaboration: F. Petricca, G. Angloher, P. Bauer, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J. C. Lanfranchi, A. Langenkämper, J. Loebell, M. Mancuso, E. Mondragon, A. Münster, C. Pagliarone, W. Potzel, F. Pröbst, R. Puig, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H. H. Trinh Thi, C. Türkoğlu, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich
arXiv:1711.07692
- 213) Search for low-mass Dark Matter with the CRESST Experiment**
H. Kluck, G. Angloher, P. Bauer, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kraus, J.-C. Lanfranchi, A. Langenkämper, J. Loebell, M. Mancuso, E. Mondragon, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, R. Puig, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoğlu, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich (the CRESST Collaboration)
arXiv:1711.01285
- 212) Proof of bulk charge ordering in the CuO_2 plane of the cuprate superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{6.9}$ by high pressure NMR**
Steven Reichardt, Michael Jurkutat, Robin Gühne, Jonas Kohlrantz, Andreas Erb, Jürgen Haase
arXiv:1710.01520
- 211) Low-energy spin dynamics and critical hole concentrations in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ ($0.07 \leq x \leq 0.2$) revealed by ^{139}La and ^{63}Cu nuclear magnetic resonance**
S.-H. Baek, A. Erb, B. Büchner
Physical Review B, 96, 094519 (2017) arXiv:1709.06148

210) Performance of a CRESST-II Detector Module with True 4π -veto

G. Angloher, P. Bauer, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J. C. Lanfranchi, A. Langenkämper, J. Loebell, M. Mancuso, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, V. Schipperges, S. Schönert, W. Seidel, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoğlu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
arXiv:1708.01581

209) Results on MeV-scale dark matter from a gram-scale cryogenic calorimeter operated above ground

G. Angloher, P. Bauer, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.-C. Lanfranchi, A. Langenkämper, J. Loebell, M. Mancuso, E. Mondragon, A. Münster, L. Oberauer, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, R. Puig, F. Reindl, J. Rothe, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, M. Stahlberg, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoglu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
arXiv:1707.06749

208) Magnetic excitations and amplitude fluctuations in insulating cuprates

Nitin Chelwani, Andreas Baum, Thomas Böhm, Matthias Opel, Francesca Venturini, Leonardo Tassini, Andreas Erb, Helmuth Berger, László Forró, Rudi Hackl
Phys. Rev. B 97, 024407 (2018) arXiv:1705.01496

207) Observation of Caroli-de Gennes-Matricon vortex states in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$

Christophe Berthod, Ivan Maggio-Aprile, Jens Bruér, Andreas Erb, Christoph Renner
Phys. Rev. Lett. 119, 237001 (2017), arXiv:1704.07685

206) Description of CRESST-II data

G. Angloher, P. Bauer, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, C. Kistner, Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, M. Mancuso, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, R. Puig, F. Reindl, S. Roth, K. Rottler, C. Sailer, Schäffner, J. Schieck, J. Schmalzer, S. Scholl, S. Schönert, W. Seidel, M.v. Sivers, Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoğlu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
arXiv:1701.08157

205) Impact of the interface quality of Pt/YIG(111) hybrids on their spin Hall magnetoresistance

Sabine Pütter, Stephan Geprägs, Richard Schlitz, Matthias Althammer, Andreas Erb, Rudolf Gross, and Sebastian T. B. Goennenwein
Appl. Phys. Lett. 110, 012403 (2017)

204) Dark-Photon Search using Data from CRESST-II Phase 2

G. Angloher, P. Bauer, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.C. Lanfranchi, J. Loebell, M. Mancuso, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, R. Puig, F. Reindl, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoğlu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
arXiv:1612.07662 submitted EPJ C

203) Results on Light Dark Matter Particles with a Low-Threshold Cresst-II Detector

The CRESST Collaboration: G. Angloher, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J. C. Lanfranchi, J. Loebell, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoglu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Phys. J. C 76 , 25 (2016)

202) Revisiting the vortex-core tunnelling spectroscopy in YBa₂Cu₃O₇-delta

Jens Bruér, Ivan Maggio-Aprile, Nathan Jenkins, Andreas Erb, Christophe Berthod, Øystein Fischer, Christoph Renner
Nature Communications 7, 11139 (2016)

201) The CRESST Dark Matter Search - Status and Perspectives

The CRESST Collaboration: F. Reindl, G. Angloher, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J. C. Lanfranchi, J. Loebell, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoglu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
arXiv:1509.09124 , submitted for publication (2015)
<http://cipanp2015.yale.edu/cipanp2015-proceedings>

200) Probing Low WIMP Masses with the Next Generation of CRESST Detector

The CRESST Collaboration: G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, K. Schäffner, J. Schieck, S. Scholl, S. Schönert, W. Seidel, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
arXiv:1503.08065 , submitted for publication (2015)

199) New Limits on Double Electron Capture of ^{40}Ca and ^{180}W

G. Angloher, M. Bauer, P. Bauer, I. Bavykina, A. Bento, C. Bucci, L. Canonica, C. Ciemiak, X. Defay, G. Deuter, A. Erb, F. v. Feilitzsch, N. Ferreira Iachellini, P. Gorla, A. Gütlein, D. Hauff, P. Huff, C. Isaila, J. Jochum, M. Kiefer, M. Kimmerle, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, C. Pagliarone, F. Petricca, S. Pfister, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, J. Schmalzer, S. Scholl, S. Schönert, W. Seidel, M. v. Sivers, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, V. Tretyak, H. H. Trinh Thi, C. Türkoglu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Journal of Physics G: Nuclear and Particle Physics 43(9), 095202 (2016)

198) Limits on momentum-dependent asymmetric dark matter with CRESST-II

G. Angloher, A. Bento, C. Bucci, L. Canonica, X. Defay, A. Erb, F. v. Feilitzsch, N. Ferreira Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, C. Pagliarone, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, H.H. Trinh Thi, C. Türkoglu, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Phys. Rev. Lett. 117, 021303 (2016)

197) Charge Variations in Cuprate Superconductors from Nuclear Magnetic Resonance

Steven Reichardt, Michael Jurkutat, Andreas Erb, Jürgen Haase
J. Supercond. Nov. Magn. , 29, 3017–3022 (2016)

196) Magnetostriction and Magnetostructural Domains in Antiferromagnetic $\text{YBa}_2\text{Cu}_3\text{O}_6$

B. Náfrádi, T. Keller, F. Hardy, C. Meingast, A. Erb, and B. Keimer
Phys. Rev. Lett. 116, 047001 (2016)

195) Electron/gamma and alpha backgrounds in CRESST-II Phase 2

R. Strauss, G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, N. Ferreira Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, S. Scholl, S. Schönert, W. Seidel, M. v. Sivers, L. Stodolsky, C. Strandhagen, A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Journal of Cosmology and Astroparticle Physics 2015 (6)

194) A detector module with highly efficient surface-alpha event rejection operated in CRESST-II Phase 2

R. Strauss, G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, N. Ferreira, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, S. Scholl, S. Schönert, W. Seidel, M. v. Sivers, M. Stanger, L. Stodolsky, C. Strandhagen, A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Eur. Phys. J C 75 , 352 (2015)

193) In-situ study of light production and transport in phonon/light detector modules for dark matter search

M. Kiefer, G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, M. v. Sivers, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Nucl. Instr. Meth. Phys. Res. Sect. A 821 (2016) 116-121

192) Impact of Coherent Neutrino Nucleus Scattering on Direct Dark Matter Searches based on CaWO₄ Crystals

A. Gütlein, G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, D. Hauff, J. Jochum, M. Kiefer, H. Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, S. Schönert, W. Seidel, M. v. Sivers, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
Astroparticle Physics 69 , 44-49 (2015)

191) Results on low mass WIMPs using an upgraded CRESST-II detector

G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, N. Ferreiro Iachellini, P. Gorla, A. Gütlein, D. Hauff, P. Huff, J. Jochum, M. Kiefer, C. Kister, Kluck, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster, F. Petricca, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, J. Schmalzer, S. Scholl, S. Schönert, W. Seidel, M. v. Sivers, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, M. Wüstrich, S. Wawoczny, M. Willers, and A. Zöller
Eur. Phys. J. C 74, 3184 (2014)

190) EURECA Conceptual Design Report

G. Angloher, E. Armengaud, C. Augier, A. Benoit, T. Bergmann, J. Blümer, A. Broniatowski, V. Brudanin, P. Camus, A. Cazes, M. Chapellier, N. Coron, G.A. Cox, C. Cuesta, F. A. Danevich, M. De Jésus, L. Dumoulin, K. Eitel, A. Erb, A. Ertl, F. von Feilitzsch, D. Filosofov, N. Fourches, E. García, J. Gascon, G. Gerbier, C. Ginestra, J. Gironnet, A. Giuliani, M. Gros, A. Gütlein, D. Hauff, S. Henry, G. Heuermann, J. Jochum, S. Jokisch, A. Juillard, C. Kister, M. Kleifges, H. Kluck, E. V. Korolkova, V. Y. Kozlov, H. Kraus, V. A. Kudryavtsev, J.-C. Lanfranchi, P. Loaiza, J. Loebell, V. I. Machulin, S. Marnieros, M. Martínez, A. Menshikov, A. Münster, X.-F. Navick, C. Nones, Y. Ortigoza, P. Pari, F. Petricca, W. Potzel, P. P. Povinec, F. Pröbst, J. Puimedón, F. Reindl, M. Robinson, T. Rolón, S. Roth, K. Rottler, S. Rozov, C. Sailer, A. Salinas, V. Sanglard, M. L. Sarsa, K. Schäffner, B. Schmidt, S. Scholl, S. Schönert, V. Seidel, B. Siebenborn, M. v. Sivers, C. Strandhagen, R. Strauß, A. Tanzke, V. I. Tretyak, M. Turad, A. Ulrich, I. Usherov, P. Veber, M. Velazquez, J. A. Villar, O. Viraphong, R. J. Walker, S. Wawoczny, M. Weber, M. Willers, M. Wüstrich,

E. Yakushev, X. Zhang, A. Zöller
Physics of the Dark Universe 3, 41-74 (2014)

189) Scanning probe microscopy in an ultra-low vibration closed-cycle cryostat

Francesca Paola Quacquarelli, Jorge Puebla, Thomas Scheler, Dieter Andres,
Christoph Bödefeld, Balazs Sipos, Claudio Dal Savio, Andreas Bauer,
Christian Pfeleiderer, Andreas Erb, Khaled Karrai
Microscopy Today 23, 12-17 (2015)

188) Distribution of electrons and holes in cuprate superconductors as determined from ^{17}O and ^{63}Cu nuclear magnetic resonance

Michael Jurkatat, Damian Rybicki, Oleg P. Sushkov, Grant V. M. Williams, Andreas Erb,
Jürgen Haase
Phys. Rev. B 90(R), 140504 (2014)

187) Radiopurity of CaWO_4 Crystals for Direct Dark Matter Search with CRESST and EURECA

A. Münster, M. v. Sivers, G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb,
F. v. Feilitzsch, P. Gorla, A. Gütlein, D. Hauff, J. Jochum, H. Kraus, J.-C. Lanfranchi,
M. Laubenstein, J. Loebell, Y. Ortigoza, F. Petricca, W. Potzel, F. Pröbst, J. Puimedon,
F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner, J. Schieck, S. Scholl, S. Schönert,
W. Seidel, L. Stodolsky, C. Strandhagen, R. Strauss, A. Tanzke, M. Uffinger, A. Ulrich,
I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich, A. Zöller
JCAP 05, 018 (2014)

186) High magnetic field studies of the Vortex Lattice structure in $\text{YBa}_2\text{Cu}_3\text{O}_7$

A.S. Cameron, J.S. White, A.T. Holmes, E. Blackburn, E.M. Forgan, R. Riyat, T. Loew,
C.D. Dewhurst, A. Erb
Phys. Rev. B 90, 054502 (2014)

185) Precision Measurements of Light Quenching in CaWO_4 Crystals at mK Temperatures

R. Strauss, G. Angloher, A. Bento, C. Bucci, L. Canonica, A. Erb, F. v. Feilitzsch, P.
Gorla, A. Gütlein, D. Hauff, J. Jochum, H. Kraus, J.-C. Lanfranchi, J. Loebell, A. Münster,
F. Petricca, W. Potzel, F. Pröbst, F. Reindl, S. Roth, K. Rottler, C. Sailer, K. Schäffner,
J. Schieck, S. Scholl, S. Schönert, W. Seidel, M. v. Sivers, L. Stodolsky, C. Strandhagen,
A. Tanzke, M. Uffinger, A. Ulrich, I. Usherov, S. Wawoczny, M. Willers, M. Wüstrich,
A. Zöller, W. Carli, C. Ciemniak, H. Hagn, D. Hellgartner
Eur. Phys. J. C 74, 2957 (2014)

184) Correlation between Fermi surface transformations and superconductivity in the electron-doped high- T_c superconductor $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_4$

T. Helm, M. V. Kartsovnik, C. Proust, B. Vignolle, C. Putzke, E. Kampert, I. Sheikin,
E.-S. Choi, J. S. Brooks, N. Bittner, W. Biberacher, A. Erb, J. Wosnitza, R. Gross
Phys. Rev. B 92, 094501 (2015)

- 183) Single crystal growth of the high temperature superconducting cuprates**
Andreas Erb
Applied Superconductivity: Handbook on Devices and Applications, editor Paul Seidel,
Wiley-VCH vol. 2 , 222-246 (2015)
- 182) Charge Inhomogeneity in Electron-Doped Pr_{1.85}Ce_{0.15}CuO₄ Determined with ⁶³Cu NMR**
Michael Jurkatat, Jürgen Haase and Andreas Erb
J. Supercond. Nov. Magn. 26, 2685-2688 (2013)
- 181) Growth of High-Purity Scintillating CaWO₄ Single Crystals for the Low-Temperature Direct Dark Matter Search Experiments CRESSTII and EURECA''**
Andreas Erb and Jean-Côme Lanfranchi
CrystEngComm, 2013, 15 (12), 2301 - 2304
- 180) Vortex lock-in transition coinciding with the 3D to 2D crossover in YBa₂Cu₃O₇**
S. Bosma, S. Weyeneth, R. Puzniak, A. Erb and H. Keller
Phys. Rev. B 86, 174502 (2012)
- 179) Influence of Annealing on the Optical and Scintillation Properties of CaWO₄ Single Crystals**
M. v. Sivers, C. Ciemniak, A. Erb, F. v. Feilitzsch, A. Gütlein, J.-C. Lanfranchi,
J. Lepelmeier, A. Münster, W. Potzel, S. Roth, R. Strauss, U. Thalhammer, S. Wawoczny,
M. Willers, A. Zöllner
Optical Materials, Volume 34, 1843–1848 (2012)
- 178) ¹³⁹La NMR investigation in underdoped La_{1.93}Sr_{0.07}CuO₄**
S.-H. Baek, A. Erb, B. Büchner, and H.-J. Grafe
Phys. Rev. B 85, 184508 (2012)
- 177) Pair breaking versus symmetry breaking: Origin of the Raman modes in superconducting cuprates**
N. Munnikes, B. Muschler, F. Venturini, L. Tassini, W. Prestel, Shimpei Ono, Yoichi Ando, D. C. Peets, W. N. Hardy, Ruixing Liang, D. A. Bonn, A. Damascelli, H. Eisaki, M. Greven, A. Erb and R. Hackl
Phys. Rev. B 84, 144523 (2011)
- 176) Extracting the dynamical effective interaction and competing order from an analysis of Raman spectra of the high-temperature La_{2-x}Sr_xCuO₄ superconductor**
S. Caprara, C. Di Castro, B. Muschler, W. Prestel, R. Hackl, M. Lambacher, A. Erb, S. Komiyama, Y. Ando, and M. Grilli
Phys. Rev. B 84, 054508 (2011)
- 175) Investigation of Particle-Hole Asymmetry in the Cuprates via Electronic Raman**
B. Moritz, S. Johnston, T. P. Devereaux, B. Muschler, W. Prestel, R. Hackl, M. Lambacher, A. Erb, Seiki Komiyama, Yoichi Ando
Physical Review B 84, 235114 (2011)

- 174) Magnetic-field-induced nonlocal effects on the vortex interactions in twin-free YBa₂Cu₃O₇**
J.S. White, R.W. Heslop, A.T. Holmes, E.M. Forgan, V. Hinkov, N. Egetenmeyer, J.L. Gavilano, M. Laver, C.D. Dewhurst, R. Cubitt, A. Erb
Phys. Rev. B 84, 104519 (2011)
- 173) Magnetic torque study of the temperature dependent anisotropy parameter in overdoped superconducting single-crystal YBa₂Cu₃O₇**
S. Bosma, S. Weyeneth, R. Puzniak, A. Erb, A. Schilling, H. Keller
Phys. Rev. B 84, 024514 (2011)
- 172) Fermi surface of the electron-doped cuprate superconductor Nd_{2-x}Ce_xCuO₄ probed by high-field magnetotransport**
M. V. Kartsovnik, T. Helm, C. Putzke, F. Wolff-Fabris, I. Sheikin, S. Lepault, C. Proust, D. Vignolles, N. Bittner, W. Biberacher, A. Erb, J. Wosnitza, and R. Gross
New J. Phys. 13, 015001 (2011)
- 171) Observation of a first-order phase transition deep within the vortex-solid region of YBa₂Cu₃O₇**
M. Reibelt, S. Weyeneth, A. Erb, and A. Schilling:
Supercond. Sci. Technol. 24, 105019 (2011)
- 170) Direct dark matter search with CRESST and EURECA**
S. Roth, G. Angloher, M. Bauer, I. Bavykina, A. Bento, A. Brown, C. Bucci, C. Ciemniak, C. Coppi, G. Deuter, A. Erb, F.v. Feilitzsch, A. Gütlein, D. Hauff, S. Henry, M. Hofmann, P. Huff, J. Imber, S. Ingelby, C. Isaila, et al.
Progress in Particle and Nuclear Physics, Volume 64, Issue 2, April 2010, Pages 457-459
- 169) Unravelling the glue and the competing order in superconducting cuprates**
S. Caprara, C. Di Castro, B. Muschler, R. Hackl, M. Lambacher, A. Erb, S. Komiya, Y. Ando, M. Grilli
arXiv:1010.0180
- 168) Quantitative comparison of single- and two-particle properties in the cuprates**
W. Prestel, F. Venturini, B. Muschler, I. Tüttő, R. Hackl, M. Lambacher, A. Erb, Seiki Komiya, Shimpei Ono, Yoichi Ando, D. Inosov, V.B. Zabolotnyy, S.V. Borisenko
Eur. Phys. J. Special Topics 188, 163-171 (2010)
- 167) Electron interactions and charge ordering in La_{2-x}Sr_xCuO₄**
B. Muschler, W. Prestel, L. Tassini, R. Hackl, M. Lambacher, A. Erb, Seiki Komiya, Yoichi Ando, D. C. Peets, W. N. Hardy, Ruixing Liang, D. A. Bonn
Eur. Phys. J. Special Topics 188, 131-152 (2010)

- 166) Magnetic Breakdown in Nd_{2-x}Ce_xCuO₄: Evidence for Translational Symmetry Breaking in a Strongly Overdoped Cuprate Superconductor**
T. Helm, M. V. Kartsovnik, I. Sheikin, M. Bartkowiak, F. Wolff-Fabris, N. Bittner, W. Biberacher, M. Lambacher, A. Erb, J. Wosnitza, R. Gross
Phys. Rev. Lett. 105, 247002 (2010)
- 165) Advances in single crystal growth and annealing treatment of electron-doped HTSC**
Michael Lambacher, Toni Helm, Mark Kartsovnik, Andreas Erb
Eur. Phys. J. Special Topics 188, 61-72 (2010)
- 164) Femtosecond Response of Quasiparticles and Phonons in Superconducting YBa₂Cu₃O_{7-δ} Studied by Wideband Terahertz Spectroscopy**
A. Pashkin, M. Porer, M. Beyer, K. W. Kim, A. Dubroka, C. Bernhard, X. Yao, Y. Dagan, R. Hackl, A. Erb, J. Demsar, R. Huber, and A. Leitenstorfer
Physical Review Letters Volume 105, 067001 (2010)
- 163) Orbital character variation of the Fermi surface and doping dependent changes of the dimensionality in BaFe_{2-x}Co_xAs₂ from angle-resolved photoemission spectroscopy**
S. Thirupathaiah, S. de Jong, R. Ovsyannikov, H. A. Dürr, A. Varykhalov, R. Follath, Y. Huang, R. Huisman, M. S. Golden, Yu-Zhong Zhang, H. O. Jeschke, R. Valentí, A. Erb, A. Gloskovskii, and J. Fink
Phys. Rev. B 81, 104512 (2010)
- 162) Droplet-like Fermi surfaces in the anti-ferromagnetic phase of EuFe₂As₂, an Fe-pnictide superconductor parent compound**
S. de Jong, E. van Heumen, S. Thirupathaiah, R. Huisman, F. Massee, J. B. Goedkoop, R. Ovsyannikov, J. Fink, H. A. Duerr, A. Gloskovskii, H.S. Jeevan, P. Gegenwart, A. Erb, L. Patthey, M. Shi, R. Follath, A. Varykhalov, M. S. Golden:
EPL 89, 27007 (2010)
- 161) Direct Dark Matter Search with CRESST and EURECA**
S. Roth, G. Angloher, M. Bauer, I. Bavykina, A. Bento, A. Brown, C. Bucci, C. Ciemniak, C. Coppi, G. Deuter A. Erb, F. v. Feilitzsch, A. Gütlein, D. Hauff, S. Henry, M. Hofmann, P. Huff, J. Imber, S. Ingelby, C. Isaila, J. Jochum, M. Kiefer, M. Kimmerle, H. Kraus, T. Lachenmaier, J.-C. Lanfranchi, R. Lang, B. Majorovits, M. Malek, R. McGowan, V. Mikhailik, E. Pantic, F. Petricca, S. Pfister, W. Potzel, F. Pröbst, K. Rottler, C. Sailer, K. Schäffner, J. Schmalzer, S. Scholl, W. Seidel, M.v. Sivers, L. Stodolsky, R. Strauss, A. J. B. Tolhurst, I. Usherov, W. Westphal:
Progress in Particle and Nuclear Physics, Elsevier, vol.65, issue (2009)
- 160) Optimization of the Czochralski Growth Process for Calcium Tungstate Detector Crystals**
C. Ciemniak, C. Coppi, A. Erb, F. von Feilitzsch, A. Gütlein, Ch. Isaila, J.-C. Lanfranchi, S. Pfister, W. Potzel, S. Roth and W. Westphal :
EAS Publications Ser. 36, 269 (2009)

- 159) Doping dependence of the chemical potential and surface electronic structure in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ and $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ using hard x-ray photoemission spectroscopy**
Kalobaran Maiti, Jörg Fink, Sanne de Jong, Mihaela Gorgoi, Chengtian Lin, Markus Raichle, Vladimir Hinkov, Michael Lambacher, Andreas Erb and Mark S. Golden:
Phys. Rev. B 80, 165132 (2009)
- 158) Electronic structure of $\text{Pr}_{2-x}\text{Ce}_x\text{CuO}_4$ studied via ARPES and LDA+DMFT+ k I.**
A. Nekrasov, N. S. Pavlov, E. Z. Kuchinskii, M. V. Sadovskii, Z. V. Pchelkina, V. B. Zabolotnyy, J. Geck, B. Büchner, S. V. Borisenko, D. S. Inosov, A. A. Kordyuk, M. Lambacher, and A. Erb
Phys. Rev. B 80, 140510(R) (2009)
- 157) Evolution of the Fermi Surface of the Electron-Doped High-Temperature Superconductor $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_4$ Revealed by Shubnikov–de Haas Oscillations**
T. Helm, M. V. Kartsovnik, M. Bartkowiak, N. Bittner, M. Lambacher, A. Erb, J. Wosnitza, and R. Gross
Phys. Rev. Lett. 103, 157002 (2009)
- 156) Fermi surface and order parameter driven vortex lattice structure transitions in twin-free $\text{YBa}_2\text{Cu}_3\text{O}_7$**
J.S. White, V. Hinkov, R.W. Heslop, R.J. Lycett, E.M. Forgan, C. Bowell, S. Straessle, A. B. Abrahamsen, M. Laver, C.D. Dewhurst, J. Kohlbrecher, J.L. Gavilano, J. Mesot, B. Keimer, A. Erb
Physical Review Letters 102, 097001 (2009)
- 155) Observations of the configuration of the high-field vortex lattice in $\text{YBa}_2\text{Cu}_3\text{O}_7$: Dependence upon temperature and angle of applied field**
J. S. White, S. P. Brown, E. M. Forgan, M. Laver, C. J. Bowell, R. J. Lycett, D. Charalambous, V. Hinkov, A. Erb, and J. Kohlbrecher
Phys. Rev. B 78, 174513 (2008)
- 154) First-Order Type Effects in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ at the Onset of Superconductivity**
L. Tassini, W. Prestel, A. Erb, M. Lambacher, R. Hackl
Phys. Rev. B 78, 020511(R) (2008)
- 153) Momentum and temperature dependence of renormalization effects in the high-temperature superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$**
V.B. Zabolotnyy, S.V. Borisenko, A.A. Kordyuk, J. Geck, D.S. Inosov, A. Koitzsch, J. Fink, M. Knupfer, B. Büchner, S.-L. Drechsler, H. Berger, A. Erb, M. Lambacher, L. Patthey, V. Hinkov, B. Keimer
Phys. Rev. B 76, 064519 (2007)

- 152) Search for stripes in antiferromagnetic lightly hole-doped YBa₂Cu₃O₆: An electron spin resonance and infrared transmission study**
A. Jánossy, K.L. Nagy, T. Fehér, L. Mihály, A. Erb
Phys. Rev. B 75, 024501 (2007)
- 151) Charge ordering phenomena in high temperature superconductors**
L. Tassini, W. Prestel, R. Hackl, A. Erb, M. Lambacher
Physica C 460, 925-926 (2007)
- 150) Effect of Zn and Ni impurities on the quasiparticle renormalization in Bi₂Sr₂CaCu₂O_{8+δ}**
V.B. Zabolotnyy, S.V. Borisenko, A.A. Kordyuk, J. Fink, J. Geck, A. Koitzsch, M. Knupfer, B. Büchner, H. Berger, A. Erb, C.T. Lin, B. Keimer, R. Follath
Physica C 460 - 462, 882-883 (2007)
- 149) Unadulterated spectral function of low-energy quasiparticles in Bi₂Sr₂CaCu₂O₈ + δ**
D. V. Evtushinsky, A. A. Kordyuk, S. V. Borisenko, V. B. Zabolotnyy, M. Knupfer, J. Fink, B. Buchner, A. V. Pan, A. Erb, C. T. Lin & H. Berger
Physical Review B 74, 172509 (2006)
- 148) Effect of Zn and Ni Impurities on the Quasiparticle Renormalization of Superconducting Bi-2212**
V. B. Zabolotnyy, S. V. Borisenko, A. A. Kordyuk, J. Fink, J. Geck, A. Koitzsch, M. Knupfer, B. Büchner, H. Berger, A. Erb, C. T. Lin, B. Keimer, and R. Follath :
Phys. Rev. Lett. 96, 037003 (2006)
- 147) Raman study of ordering phenomena in copper–oxygen systems**
R. Hackl, L. Tassini, F. Venturini, A. Erb, Ch. Hartinger, N. Kikugawa and T. Fujita
Journal of Physics and Chemistry of Solids, Volume 67, Issues 1-3, January-March 2006, Pages 289-293
- 146) Ordering Phenomena in Cuprates**
R. Hackl, L. Tassini, F. Venturini, Ch. Hartinger, A. Erb, N. Kikugawa & T. Fujita
Adv. in Solid State Phys., B. Kramer (Ed.) 45, 227-238 (2005)
- 145) Magnetic moments of W 5d in Ca₂CrWO₆ and Sr₂CrWO₆ double perovskites**
P. Majewski, S. Geprägs, A. Boger, M. Opel, A. Erb, R. Gross, G. Vaitheeswaran, V. Kanchana, A. Delin, F. Wilhelm, A. Rogalev, and L. Alff:
Phys. Rev. B 72, 132402 (2005)
- 144) Ferromagnetism in Mn-doped ZnO due to impurity bands**
K.-W. Nielsen, J.B. Philipp, M. Opel, A. Erb, J. Simon, L. Alff and R. Gross
Superlattices and Microstructures, Volume 37, Issue 5, May 2005, Pages 327-332

- 143) Effect of rare earth ion substitution on the magnetic and transport properties of Pr_{0.7}RE_{0.04}Sr_{0.26}MnO₃ (RE = Er, Tb and Ho)**
 N. Rama, J. B. Philipp, M. Opel, A. Erb, V. Sankaranarayanan, R. Gross, M. S. Ramachandra Rao
 European Physical Journal B 38, 553-557 (2004)
- 142) Magnetoresistance and magnetic properties of the double perovskites**
 J. B. Philipp, P. Majewski, D. Reisinger, S. Geprägs, M. Opel, A. Erb, L. Alff, R. Gross
 Acta Physica Polonica A 105, 7-26 (2004)
- 141) Neutron diffraction, specific heat and μ SR study of the spin-chain compounds Ca_{2-x}Y_{2-x}Cu₅O₁₀**
 V. Kargl, A. Mirmelstein, P. Böni; D. Sheptyakov; A. Amato; S. Kazakov, J. Karpinski; A. Erb
 Physica B 350, (2004) e257-e259
- 140) Triangular to Square Flux Lattice Phase Transition in YBa₂Cu₃O₇**
 S. P. Brown, D. Charalambous, E.C. Jones, E.M. Forgan, P.G. Kealey, A. Erb, and J. Kohlbrecher
 Phys. Rev. Lett. 92, (2004) 067004
- 139) Structural and doping effects in the half-metallic double perovskite A₂CrWO₆ (A=Sr, Ba, and Ca)**
 J. B. Philipp, P. Majewski, L. Alff, A. Erb, R. Gross, T. Graf, M. S. Brandt, J. Simon, T. Walther, W. Mader, D. Topwal, and D. D. Sarma
 Phys. Rev. B 68, 144431 (2003)
- 138) Diagonal Antiferromagnetic Easy Axis in Lightly Hole Doped Y_{1-x}Ca_xBa₂Cu₃O₆**
 András Jánossy, Titusz Fehér, and Andreas Erb
 Phys. Rev. Lett. 91, (2003) 177001
- 137) Structural and doping effects in the half-metallic double perovskite A₂CrWO₆ (A=Sr, Ba and Ca)**
 J. B. Philipp, P. Majewski, L. Alff, A. Erb, and R. Gross, T. Graf and M. S. Brandt, J. Simon, T. Walther, and W. Mader, D. Topwal and D. D. Sarma
 Phys. Rev. B 68, (2003) 144431
- 136) Sub-unit cell layer-by-layer growth of Fe₃O₄, MgO, and Sr₂RuO₄ thin films**
 D. Reisinger, B. Blass, J. Klein, J. B. Philipp, M. Schönecke, A. Erb, L. Alff, and R. Gross
 Applied Physics 77, 619-621 (2003)

- 135) Epitaxy of Fe₃O₄ on Si(001) by pulsed laser deposition using a TiN/MgO buffer layer**
D. Reisinger, M. Schonecke, T. Brenninger, M. Opel, A. Erb, L. Alff, and R. Gross
J. Appl. Phys. 94, (2003) 1857
- 134) Orbital order and anisotropic transport properties in doped manganites induced by epitaxial coherency strain**
J. Klein, J. B. Philipp, D. Reisinger, M. Opel, A. Marx, A. Erb, L. Alff, and R. Gross
J. Appl. Phys. 93, (2003) 7373
- 133) Epitaxial growth and transport properties of Sr₂CrWO₆ thin films**
J. B. Philipp, D. Reisinger, M. Schonecke, M. Opel, A. Marx, A. Erb, L. Alff, and R. Gross
J. Appl. Phys. 93, (2003) 6853
- 132) Anisotropy of the low-field critical point of the melting line in twinned YBCO single crystals**
J. Figueras, T. Puig, X. Obradors, A. Erb, E. Walker
Phys. Rev. B 65, (2002) 092505
- 131) Anisotropic behaviour of the melting line and the low critical field in YBCO**
J. Figueras, T. Puig, X. Obradors, A. Erb, E. Walker
Physica C: Superconductivity 369 (1-4) (2002) pp. 209-212
- 130) The oxygen isotope effect in the a-b-plane reflectance of underdoped YBa₂Cu₃O₇**
N. L. Wang, T. Timusk, J. P. Franck, P. Schweiss, M. Braden and A. Erb
Phys. Rev. Lett. 89, (2002) 087003
- 129) Anomalous microwave conductivity due to collective transport in the pseudogap state of cuprate superconductors**
C. Kusko, Z. Zhai, N. Hakim, R. S. Markiewicz, S. Sridhar, D. Colson, V. Vialetuillen, A. Forget, Yu. A. Nefyodov, M.R. Trunin, N. N. Kolesnikov, A. Maignan, A. Daignere, A. Erb
Phys. Rev. B 65, (2002) 132501
- 128) Direct observation and anisotropy of the contribution of gap nodes in the low-temperature specific heat of YBa₂Cu₃O₇**
Yuxing Wang, Bernard Revaz, Andreas Erb, and Alain Junod
Phys. Rev. B 63, 094508 (2001)
- 127) A Light-Scattering Study of Dynamical Carrier Properties in Cuprate Systems**
M. Opel, R. Nemetschek, F. Venturini, R. Hackl, I. Tüttö, H. Berger, A. Erb, B. Revaz and E. Walker
Ferroelectrics 249, 155 (2001)

- 126) Onset of dielectric modes at 110 K and 60 K due to local lattice distortions in nonsuperconducting YBa₂Cu₃O_{6.0} crystals**
Z. Zhai, P. V. Parimi, J. B. Sokoloff, S. Sridhar, and A. Erb
Phys. Rev. B 63, (2001) 092508
- 125) Spin-dependent transport in the double-perovskite Sr₂CrWO₆**
J. B. Philipp, D. Reisinger, M. Schonecke, A. Marx, A. Erb, L. Alff, R. Gross, and J. Klein
Applied Physics Letters 79 (2001) 3654
- 124) ac Losses in Bi,Pb(2223) barrier tapes**
G. Witz, M. Dhallé, R. Passerini, X. -D. Su, Y. B. Huang, A. Erb and R. Flükiger
Cryogenics, Volume 41, Issue 2, (2001), 97-101
- 123) Scaling of the Hall resistivity in the solid and liquid vortex phases in twinned singlecrystal YBa₂Cu₃O_{7-x}**
G. D'Anna, V. Berseth, L. Forró, A. Erb and E. Walker
Phys. Rev. B 61, 4215 (2000)
- 122) Midinfrared absorption in YBa₂Cu₃O₆: Evidence for a failure of spin-wave theory for spin 1/2 in two dimensions**
M. Grüninger, D. van der Marel, A. Damascelli, A. Erb, Th. Wolf, T. Nunner, and T. Kopp
Phys. Rev. B 62, (2000) 12422
- 121) Effect of doping on the linear temperature dependence of the magnetic penetration depth in cuprate superconductors**
J. Le Coche, G. Lamura, A. Gauzzi, F. Licci, A. Revcolevschi, A. Erb, G. Deutscher, J. Bok
Physica C: Superconductivity, 341-348 (1-4) (2000) 1669-1670
- 120) Temperature dependence of tunneling spectra in YBa₂Cu₃O_{7- δ} and Bi₂Sr₂CaCu₂O_{8+ δ} single crystals**
Ivan Maggio-Aprile, Christophe Renner, Andreas Erb, Eric Walker, Bernard Revaz, Jean-Yves Genoud, Kazuo Kadowaki and Øystein Fischer
Journal of Electron Spectroscopy and Related Phenomena, Volume 109, (2000), 147
- 119) Experimental survey of critical fluctuations in the specific heat of high-temperature superconductors**
Alain Junod, Marlyse Roulin, Bernard Revaz and Andreas Erb
Physica B: Condensed Matter, 280 (1-4) (2000) pp. 214-219
- 118) Direct Observation and Anisotropy of the Contribution of Gap nodes in the Low Temperature Specific Heat of YBa₂Cu₃O₇**
Yuxing Wang, Bernard Revaz, Andreas Erb, Alain Junod.
Physica B: Condensed Matter, 284-288 (1-4) (2000) pp. 1043-1044

- 117) Influence of neutron irradiation on the fishtail behavior of YBa₂Cu₃O_{7-x} single crystals**
 Anke Köhler, Franz M. Sauerzopf, Martin Zehetmayer, Andreas Erb and Harald W. Weber
 Physica C: Superconductivity, 341-348 (1-4) (2000) pp. 1467-1468
- 116) Observation of out-of-phase bilayer plasmons in YBa₂Cu₃O_{7-d}**
 M. Grüninger, D. van der Marel, A.A. Tsvetkov, and A. Erb,
 Physical Review Letters 84, (2000) 1575
- 115) Carrier relaxation, pseudogap, and superconducting gap in high-T_c cuprates: A Raman scattering study**
 M. Opel, R. Nemetschek, C. Hoffmann, R. Philipp, P. F. Müller, R. Hackl, I. Tüttő, A. Erb, B. Revaz, E. Walker, H. Berger, and L. Forro
 Phys. Rev. B 61, (2000) 9752
- 114) Direct observation of the d-wave contribution to the low temperature specific heat of the high temperature Superconductor YBa₂Cu₃O₇**
 Alain Junod, Bernard Revaz, Yuxing Wang, Andreas Erb
 Physica B 284-288 (2000) 1043
- 113) The d-wave contribution to the low temperature specific heat of YBa₂Cu₃O₇**
 Yuxing Wang, Alain Junod, Bernard Revaz and Andreas Erb
 Physica C: Superconductivity, 341-348 (1-4) (2000) pp. 1073-1074
- 112) A Compton scattering study of insulating PrBa₂Cu₃O_{7-δ} and superconducting YBa₂Cu₃O_{7-δ}**
 A. Shukla, B. Barbiellini, A. Erb, A. Manuel, B. Revaz, T. Buslaps, V. Honkimaki and P. Suortti
 J. Physics and Chemistry of Solids 61, (2000), 357-360
- 111) Experimental evidence for fast cluster formation of chain oxygen vacancies in YBa₂Cu₃O_{7-δ} being at the origin of the fishtail anomaly**
 Andreas Erb, Alfred Manuel, Riccardo Pozzi, Mihael Mali, Marc Dhalle, Frank Marti, Jean -Yves Genoud , Bernard Revaz, Alain Junod, Dharmavaram Vasumathi, Shoji Ishibashi , Abhay Shukla , Eric Walker, Øystein Fischer, Detlef Brinkmann and René Flükiger
 Solid State Communications 112 (1999) 245

- 110) Interaction of Bi, Pb(2223) precursors with metal zirconates**
 Y. B. Huang, G. Witz, E. Gianinni, A. Erb, O. A. Shlyakhtin and R. Flükiger
 Supercond. Sci. Technol. 12 (1999) 411
- 109) Development of Bi(2223) Tapes with low AC losses**
 F. Marti, Y. B. Huang, M. Dhalle, G. Witz, E. Gianinni, A. Erb, E. Walker, S. Clerc,
 K. Kwasnitza and R. Flükiger
 proceedings of ISS 98 conference held in Nov. (1998) Fukuoka, Japan
 Advances in Superconductivity XI, Springer Verlag Tokyo; Japan (1999) 839
- 108) First order melting transitions observed from resistivity measurements in ultra-pure $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ single crystals with high twin boundary density**
 J.-C. Grivel, Y. Eltsev, M. Anderson, Ö. Rapp, A. Erb, E. Walker, R. Flükiger
 Physica C 322 (1999) 203
- 107) High resolution specific heat experiments on the vortex melting line in $\text{M}\text{Ba}_2\text{Cu}_3\text{O}_x$ (M = Y, Dy, Eu) single crystals : Observation of first- and second-order transitions up to 16 Teslas**
 Marlyse Roulin, Bernard Revaz, Alain Junod, Andreas Erb and Eric Walker
 Proc. of the NATO Advanced Study Institute on the Physics and Material Science of
 Vortex States, Flux Pinning and Dynamics Kusadasi, Turkey (Aug. 1998)
 Nato Science Series E 356 (1999) 489
 Kluwer Academic Publisher, Sam Bose and Ram Kossowski, eds.
- 106) Calorimetric study of the transitions between the different vortex states in $\text{YBa}_2\text{Cu}_3\text{O}_7$**
 F. Bouquet, C. Marcenat, R. Calemczuk, A. Erb, A. Junod, M. Roulin, U. Welp, K.
 Kwok, G. W. Crabtree, N. E. Phillips, R. A. Fischer, A. Schilling
 Proc. of the NATO Advanced Study Institute on the Physics and Material Science of
 Vortex States, Flux Pinning and Dynamics Kusadasi, Turkey (Aug. 1998)
 Nato Science Series E 356 (1999) 74 Kluwer Academic Publisher, Sam Bose and Ram
 Kossowski, eds.
- 105) Charged magnons and magneto-elastic polarons in the mid-infrared spectrum of $\text{YBa}_2\text{Cu}_3\text{O}_6$**
 M. Grüninger, D. van der Marel, A. Damascelli, A. Zibold, H.P. Gesserich, A. Erb, M.
 Kläser, Th. Wolf, T. Nunner and T. Kopp
 Physica C: Superconductivity, 317-318 (1-4) (1999) pp. 286-291
- 104) O-2p holes in tetravalent oxides of Ce and Pr and the Fehrenbacher-Rice hybrid in $\text{PrBa}_2\text{Cu}_3\text{O}_{7-d}$**
 Z. Hu, R. Meier, C. Schüssler-Langeheine, E. Weschke, G. Kaindl, I. Felner, M. Merz,
 N. Nücker, S. Schuppler, A. Erb
 Phys. Rev. B 60 (1999) 1460

- 103) Hole depletion and localization due to disorder in insulating PrBa₂Cu₃O_{7-d};
A Compton scattering study**
Abhay Shukla, Bernardo Barbiellini, Andreas Erb, Alfred Manuel, Thomas Bulaps,
Veijo Honkämäki and Pekka Suortti
Phys. Rev. B 59 (1999) 12127
- 102) Spin dynamics in the paramagnetic phase of YBa₂Cu₃O_{6.12} as seen by Cu NMR**
R. Pozzi, M. Mali, D. Brinkmann, A. Erb
Phys. Rev. B 60 (1999) 9650
- 101) Physical Origin of the buckling in CuO₂: Electron- phonon coupling and Raman spectra**
M. Opel, R. Hackl, T. P. Devereaux, A. Virosztek, A. Zawadowski, A. Erb, E. Walker,
H. Berger, L. Forro
Phys. Rev. B 60 (1999) 9836
- 100) Pseudogap and Superconducting Gap in YBa₂Cu₃O_{6+x}: A Raman Study**
M. Opel, M. Göttinger, C. Hoffmann R. Nemetschek, Richard Philipp, Francesca
Venturini, R. Hackl, A. Erb and E. Walker
J. Low Temp. Phys. 117 (1999) 347
- 99) STM Vortex Core Spectroscopy and Non-BCS Pairing in High Temperature Superconductors**
Christophe Renner, Bernard Revaz, Kazuo Kadowaki, Ivan Maggio-Aprile, Andreas
Erb, Eric Walker and Oystein Fischer
STM Vortex Core Spectroscopy and Non-BCS Pairing in High Temperature
Superconductors, proceedings of ISS 98 conference held in Nov. (1998)
Fukuoka, Japan
Advances in Superconductivity XI, Springer Verlag Tokyo; Japan (1999) 145
- 98) Specific Heat of high temperature superconductors in high fields at T_c: from BCS to the Bose-Einstein condensation**
Alain Junod, Andreas Erb, Christophe Renner
Proceedings of the ACS'98 conference, Crete, Greece Sept. 1998
Physica C 317-318 (1999) 333
- 97) Charged magnons and magneto-elastic polarons in the MIR spectrum of YBa₂Cu₃O₆**
M. Grüninger, D. van der Marel, A. Damascelli, A. Zibold, H. P. Geserich, A. Erb,
M. Kläser, Th. Wolf, T. Nummer and T. Kopp
Proceedings of the ACS'98 conference, Crete, Greece Sept. 1998
Physica C 317-318 (1999) 286

- 96) **Strong shift of the irreversibility line in the high T_c superconductors upon vortex shaking with an oscillating magnetic field**
M. Willemin, C. Rossel, J. Hofer, H. Keller, A. Erb
Phys. Rev. B 58 (1998) R5940
- 95) **Specific Heat Peaks Observed up to 16 Tesla on the Melting Line of Vortex Matter in $\text{DyBa}_2\text{Cu}_3\text{O}_7$**
Bernard Revaz, Alain Junod and Andreas Erb
Phys. Rev. B 58 (1998) 11153
- 94) **Comparative Study of oxygen diffusion in rare earth $\text{REBa}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystals (RE=Y, Er,Dy) with different impurity levels**
Marion Kläser, Joachim Kaiser, Fredy Stock, German Müller-Vogt and Andreas Erb
Physica C 306 (1998) 188
- 93) **Improvements in crystal growth and crystal homogeneity and its impact on physics**
Andreas Erb, Eric Walker, Jean -Yves Genoud and René Flükiger
proceedings of ISS 97 conference held in Nov. (1997) Gifu, Japan
Advances in Superconductivity X, Springer Verlag Tokyo; Japan, (1998) 355
- 92) **Positron annihilation in superconducting 123 compounds**
M. Peter, A.A. Manuel, A. Erb
Int. J. Mod. Phys. Vol. 12 No 29-31 (1998) 3187-3202.
- 91) **Improvements in crystal growth and crystal homogeneity and its impact on physics**
Andreas Erb, Eric Walker, Jean -Yves Genoud and René Flükiger
J. Phys. Chem. Solids 59 (1998) 2180
- 90) **d+s wave superconductivity: Analysis of the electronic Raman data of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ and other cuprates**
R. Nemetschek, R. Hackl M. Opel, R. Phillip, M. T. Beal-Monod, J. B. Bieri, K. Maki, A.Erb, E. Walker
E. Phys. J. 5 (1998) 495
- 89) **Hall anomaly and vortex-lattice melting in superconducting single crystal $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$**
G. D'Anna, V. Berseth, L. Forro, A. Erb, E. Walker
Phys. Rev. Letters 81 (1998) 2530
- 88) **Observation of d-wave scaling relations in the mixed state specific heat of $\text{YBa}_2\text{Cu}_3\text{O}_7$**
B. Revaz, J.-Y. Genoud, A. Junod, K. Neumaier, A. Erb, E. Walker
Phys. Rev. Lett. 80 (1998) 3364

- 87) **Systematics of two-component superconductivity in $\text{YBa}_2\text{Cu}_3\text{O}_{6.95}$ from microwave measurements of high quality crystals**
H. Srikanth, Z. Zhai, S. Sridhar, A. Erb, E. Walker
Phys. Rev. B., 57 (1998) 7986
- 86) **Calorimetric Transitions on the Melting Line of the Vortex System as a Function of Oxygen Deficiency in High-Purity $\text{YBa}_2\text{Cu}_3\text{O}_x$**
Marlyse Roulin, Alain Junod, Andreas Erb, Eric Walker, René Flükiger and Jerome Siervo
Phys. Rev. Lett. 80 (1998) 1722
- 85) **Infrared spectroscopy on $\text{Y}_{1-x}\text{RE}_x\text{Ba}_2\text{Cu}_3\text{Zn}_y\text{O}_6$ (RE=Pr, Gd, x=0 and 0.8; y=0 and 0.15)**
M. Grüniger, D. van der Marel, H.P. Geserich, Th. Wolf, A. Erb and T. Kopp
Physica B: Condensed Matter, 244 (1-4) (1998) pp. 60-65
- 84) **Magnetic ordering in Single crystals of $\text{PrBa}_2\text{Cu}_3\text{O}_{7-\delta}$**
S. Uma, W. Schnelle, E. Gmelin, G. Rangarajan, S. Skanthakumar, J. W. Lynn, R. Walter, T. Lorenz, B. Büchner, E. Walker and A. Erb
J. Phys.: Cond. Matter 10 (1998) L33
- 83) **$\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystals revisited: Scanning probe data on very pure samples grown in BaZrO_3 crucibles**
U. Hübner, P. Jess, H. P. Lang, A. Erb, E. Walker, M. Regier, D. Schild, J. Halbritter, H.-J. Güntherrodt
Appl. Phys. A 66 (1998) S1219
- 82) **Microwave properties of YBCO crystals grown in BaZrO_3 crucibles: Influence of c-axis currents**
H. Srikanth, Z. Zhai, S. Sridhar, A. Erb
J. Phys. Chem. Solids 59 (1998) 2105
- 81) **The quasiparticle DOS in the vortex state of $\text{YBa}_2\text{Cu}_3\text{O}_7$ inferred from specific heat measurements**
B. Revaz, J. Y. Genoud, A. Junod, A. Erb, E. Walker
J. Phys. Chem. Solids 59 (1998) 2118
- 80) **Pseudogap and Superconducting Gap in the electronic Raman Spectra of Underdoped Cuprates**
M. Opel, R. Nemetschek, C. Hoffmann, P.F. Müller, R. Phillipp, R. Hackl, H. Berger, L. Forro, A. Erb, E. Walker
J. Phys. Chem. Solids 59 (1998) 1942

- 79) **Enhanced Electron-Phonon and its irrelevance to high T_c Superconductivity**
 T.P. Devereaux, A. Virosztek, A. Zawadowski, M. Opel, P.F. Müller, C. Hoffmann, R. Phillip, R. Nemetschek, R. Hackl, A. Erb, E. Walker, H. Berger and L. Forro
 Solid State Comm. 108 (1998) 407
- 78) **On the origin of the so-called fishtail effect in single crystals of the RE - 123 Compounds (RE = Y, Er, Nd)**
 Andreas Erb, Jean-Yves Genoud, Marc Dhalle, Frank Marti, Eric Walker and René Flükiger
 Proceedings of the EUCAS'97 conference held June 1997, Velhoven, The Netherlands
 Applied Superconductivity 158 (1997) 1109
 Institute of Physics Publishing, Bristol and Philadelphia
- 77) **10 years of crystal growth of the 123 - and 124 - high T_c superconductors**
 A. Erb, E. Walker, J.-Y. Genoud and R. Flükiger
 From Al₂O₃ to BaZrO₃ - Progress in crystal growth and sample quality and its impact on physics
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 459
- 76) **Growth of high purity YBa₂Cu₃O₈ and Y₂Ba₂Cu₇O_{15.0} single crystals in BaZrO₃ crucibles under high oxygen pressure, and absence of magnetic "fishtail" effect**
 J.-Y. Genoud, A. Erb, B. Revaz and A. Junod
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 457
- 75) **Reversible suppression of the so-called fishtail effect in ultra pure single crystals of YBa₂Cu₃O_{7.0}**
 A. Erb, J.-Y. Genoud, M. Dhalle, E. Walker and R. Flükiger
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 2145
- 74) **Magneto-optical observation of twisted vortices in type-II superconductors**
 M. V. Indenbom, C.J. van der Beek, V. Berseth, W. Benoit, G. D'Anna, A. Erb, E. Walker, R. Flükiger
 Nature 385 (1997) 702
- 73) **High resolution specific heat experiments on the melting line of the vortex lattice and glass in YBa₂Cu₃O_{7.0}: Observation of first- and second-order transitions up to 16 Teslas**
 M. Roulin, A. Junod, E. Walker and A. Erb
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 1401

- 72) Disappearance of the force-free configuration at the vortex lattice phase transition in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ single crystals**
 C.J. van der Beek, M. V. Indenbom, V. Berseth, W. Benoit, A. Erb, R. Flükiger
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 1953
- 71) Observation of the vortex lattice melting in $\text{YBa}_2\text{Cu}_3\text{O}_7$ by specific heat measurements in very high magnetic fields : $H \square 23$ Tesla**
 C. Marcenat, R. Calemczuk, A. Erb, E. Walker, A. Junod
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 2059
- 70) Specific heat anomalies on the vortex melting line in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ up to $B=23$ Teslas: Observation of First and Second-Order Transitions, Effect of oxygen Doping, Field Orientation, Crystal Purity and Detwinning**
 A. Junod, M. Roulin, J.-Y. Genoud, B. Revaz, E. Walker, A. Erb, C. Marcenat, R. Calemczuk, F. Bouquet
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 1425
- 69) Improvements in crystal growth and crystal homogeneity and its impact on physics**
 Andreas Erb, Eric Walker, Jean -Yves Genoud and René Flükiger
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 89
- 68) Fabrication and Microstructure of $\text{Bi}(2223)$ Multi-Filamentary Tapes with low AC Losses**
 Y. B. Huang, G. Grasso, F. Marti, A. Erb, S. Clerc, K. Kwasnitza and R. Flükiger
 Proceedings of the SPA '97 6-8 Mars (1997) Xian China, 217
 World Scientific Publishing Co , Pt Ltd Singapore
- 67) Formation of the $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ phase with and without Pb substitution**
 J.-C. Grivel, G. Grasso, A. Erb and R. Flükiger
 Proceedings of the EUCAS '97 conference June 1997, Velhoven, The Netherlands
 Applied Superconductivity 158 (1997) 941
- 66) Microwave response of $\text{YBa}_2\text{Cu}_3\text{O}_{6.95}$ crystals: Evidence for a multi-component order parameter**
 H. Srikanth, B. A. Willemsen T. Jacobs, S. Sridhar, A. Erb, E. Walker, R. Flükiger
 Phys. Rev. B 55 No. 22 (1997) R14733

- 65) **Evidence for multi-component superconducting order parameter in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystals from microwave measurements**
 S. Sridhar, H. Srikanth, Z. Zhai, B. A. Willemsen, T. Jacobs, A. Erb, E. Walker, R. Flükiger
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 256
- 64) **Specific heat Experiments in High Magnetic Fields: D-wave Symmetry, Fluctuations, Vortex Melting**
 A. Junod, M. Roulin, B. Revaz, A. Erb and E. Walker
 Proceedings of the International Summer School, Cargese France 1997 (eds. Bok and Deutscher, Plenum)
- 63) **Correlation between the "fishtail" effect in the magnetization and the Schottky contribution in the specific heat of high purity $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ crystals**
 J.-Y. Genoud, B. Revaz, A. Erb, A. Mirmelstein, G. Triscone and A. Junod
 Czechoslovak Journal of Physics, Vol. 97 No. 10 (1997) 1047
- 62) **Specific heat peaks observed up to 16 Teslas on the melting line of the vortex lattice in $\text{YBa}_2\text{Cu}_3\text{O}_7$**
 A. Junod, M. Roulin, J.-Y- Genoud, B. Revaz, A. Erb, E. Walker
 Physica C 275 (1997) 245
- 61) **Critical currents approaching the depairing limit at a twin boundary in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$**
 I. Maggio-Aprile, Ch. Renner, A. Erb, E. Walker and O. Fischer
 Nature 390 (1997) 487
- 60) **X-ray absorption spectroscopy of detwinned $\text{Pr}_{1-x}\text{Y}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystals : electronic structure and hole distribution**
 M. Merz, N. Nücker , E. Pellegrin, P. Schweiss, S. Schuppler, M. Kielwein, M. Knupfer, M.S. Golden, J. Fink, C.T. Chen, V. Chakarian, Y.U. Idzerda, A. Erb
 Phys. Rev. B 55 No.14 (1997) 9160
- 59) **Specific heat of pure $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystals in magnetic fields**
 S. Uma, W. Schnelle, E. Gmelin, G. Rangarajan, and A. Erb
 J. Appl. Phys. 81, (1997) 4227
- 58) **Pseudogap and superconducting gap in the electronic Raman spectra of underdoped cuprate superconductors**
 R. Nemetschek, M. Opel, C. H. Hoffmann, P.F. Müller, R. Hackl, H. Berger, L. Forro, A. Erb, E. Walker
 Phys. Rev. Letters 78 No. 25 (1997) 4837

- 57) **Tunneling spectroscopy and STS observation of vortices on high temperature superconductors**
 O. Fischer, Ch. Renner, I. Maggio-Aprile, A. Erb, E. Walker B. Revaz and J.-Y. Genoud
 Proc. of the M²HTSL Conference in Beijing (1997),
 Physica C 282-287 (1997) 315
- 56) **Specific heat of high temperature superconductors in high magnetic fields**
 A. Junod, M. Roulin, B. Revaz, A. Mirmelstein, J.-Y- Genoud, E. Walker and A. Erb
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 1399
- 55) **Observation of coherent Josephson response in the non-linear ab-plane microwave impedance of YBa₂Cu₃O_{7- δ} single crystals**
 Z. Zhai, H. Srikanth, S. Sridhar, A. Erb, E. Walker, R. Flükiger
 Proc. of the M²HTSL Conference in Beijing (1997)
 Physica C 282-287 (1997) 1601
- 54) **Reversible suppression of the so-called fishtail effect in ultra pure single crystals of YBa₂Cu₃O_{7- δ} achieved by proper oxygenation**
 A. Erb, J.-Y. Genoud, F. Marti, M. Däumling, E. Walker and R. Flükiger
 J. of Low Temp. Phys. 105 (1996) 1023
- 53) **Monotonic Dependence of j_c on the Magnetic Field in Twinned Crystals of YBa₂Cu₃O_{7- δ} and ErBa₂Cu₃O_{7- δ}**
 M. Däumling, A. Erb, E. Walker, J.-Y. Genoud, R. Flükiger
 Physica C 257 (1996) 371
- 52) **The use of BaZrO₃ crucibles in crystal growth of the high T_c superconductors: Progress in crystal growth as well as in sample quality**
 A. Erb, E. Walker, R. Flükiger
 Physica C 258 (1996) 9
- 51) **In situ resistivity measurements during the oxygenation of YBa₂Cu₃O_{7- δ} and Gd_{0.8}Y_{0.2}Ba₂Cu₃O_{7- δ} single crystals**
 A. Erb, B. Greb, G. Müller-Vogt
 Physica C 259 (1996) 83
- 50) **D-wave specific Heat in Y-123 and Bi-2212 single crystals: new data, alternative explanation**
 B. Revaz, A. Junod, A. Mirmelstein, A. Erb, J.-Y. Genoud and G. Triscone
 Czechoslovak Journal of Physics, Vol 46 (1996) 1205

- 49) **Melting of the Flux Line Lattice observed by Specific Heat Experiments in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$**
M. Roulin, A. Junod, A. Erb and E. Walker:
J. Low Temp. Phys. 105 (1996) 1099
- 48) **Dynamics of the Force-Free Current Configuration**
M. V. Indenbom, V. Berseth, C.J. van der Beek, W. Benoit, A. Erb, E. Walker, R. Flükiger
Proceedings of the 8 th IWCC, Katakyushu, Japan May 27-29 (1996)
Critical currents in Superconductors (eds. T. Matsuhita and K. Yamafuji) World Scientific, Singapore, New Jersey, London, Hongkong
- 47) **Electronic structure of individual flux lines in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$**
Ch. Renner, I. Maggio-Aprile, A. Erb, E. Walker, O. Fischer
Spectroscopic Studies of Superconductors (eds. I. Bozovic and D. van der Marel)
Proc. SPIE Int. Soc. Opt. Eng. 2696, 322 (1996)
- 46) **X-ray absorption spectroscopy of detwinned $\text{Pr}_{1-x}\text{Y}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-x}$ single crystals**
M. Merz, N. Nücker, E. Pellegrin, S. Schuppler, M. Kielwein, M. Knupfer, M.S. Golden, J. Fink, C.T. Chen, V. Chakarian, Y.U. Idzerda and A. Erb
J. Low Temp. Phys. 105 (1996) 347
- 45) **Optical Investigation of $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-x}$ single domain crystals. A comparison between impurity-free and Al doped samples**
K. Widder, M. Merz, D. Berner, J. Münzel, H.P. Geserich, A. Erb, R. Flükiger, W. Widder, H.F. Braun
Physica C 264 (1996) 11
- 44) **Specific Heat of Single Crystalline $\text{PrBa}_2\text{Cu}_3\text{O}_{7-x}$ in Magnetic Fields**
S. Uma, W. Schnelle, E. Gmelin, G. Rangarajan, A. Erb, E. Walker and R. Flükiger
Czechoslovak Journal of Physics, Vol 46 (1996) 2677
- 43) **Instabilities of the force-free configurations**
V. Berseth, M. V. Indenbom, C.J. van der Beek, A. Erb, E. Walker, R. Flükiger and W. Benoit
Czechoslovak Journal of Physics, Vol 46 (1996) 1539
- 42) **Probing the Mid-Infrared Spectrum of $\text{YBa}_2\text{Cu}_3\text{O}_{6.0}$ with High Magnetic Fields and Zinc Doping**
M. Grüniger, D. van der Marcel, P.J.M. van Bentum, A. Erb, Th. Wolf, T. Kopp
Czechoslovak Journal of Physics, Vol 46 (1996) 1127
- 41) **Far- and Mid Infrared Spectrum of $\text{YBa}_2\text{Cu}_3\text{O}_{6.0}$ in High Magnetic Fields**
M. Grüniger, D. van der Marcel, P.J.M. van Bentum, A. Erb, H. P. Geserich, T. Kopp
J. Low Temp. Phys. 105 (1996) 389

- 40) **Scanning Tunneling Spectroscopy Studies in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$**
I. Maggio-Aprile, Ch. Renner, A. Erb, E. Walker and O. Fischer
J. Low Temp. Phys. 105 (1996) 1129
- 39) **Scanning/ Friction Force Microscopy Study of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Single Crystals grown From BaZrO_3 Crucibles**
H. P. Lang, A. Erb, P. Jess, U. Hubler and H.- J. Güntherodt
J. Low Temp. Phys. 105 (1996) 1373
- 38) **Anisotropy of the In Plane Thermal Conductivity in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$**
B. Wand, G. Sparn, F. Steglich, X. Liu, J. Wosnitza, H. v. Löhneysen, A. Erb,
M. Kläser, G. Müller-Vogt
J. Low Temp. Phys. 105 (1996) 993
- 37) **Giant pressure effect in oxygen deficient $\text{YBa}_2\text{Cu}_3\text{O}_x$**
W.H. Fietz, R. Quenzel, H.A. Ludwig, K. Grube, S.I. Schlachter, F.W. Hornung, Th.
Wolf, A. Erb, M. Kläser, G. Müller-Vogt
Physica C 270 (1996) 258
- 36) **Field Dependence of Current Density in Strong Pinning YBCO Single Crystals with Different Microstructure**
R. Hiergeist, R. Hergt, A. Erb
Institute of Physics Conference Series Number 148 Vol. 1: Applied Superconductivity
(1995) 315-318, eds. D. Dew Hughes, Institute of Physics Publishing, Bristol and
Philadelphia (1995)
- 35) **Site-specific and doping-dependent electronic structure of $\text{YBa}_2\text{Cu}_3\text{O}_x$ probed by O 1s and Cu 2p x-ray-absorption spectroscopy**
N. Nücker, E. Pellegrin, P. Schweiss, J. Fink, S.L. Molodtsov, C.T. Simmons,
G. Kaindl, W. Frentrop, A. Erb, G. Müller-Vogt
Phys.Rev. B 51 No.13 (1995), 8529
- 34) **Site-specific and doping dependent electronic structure of $\text{YBa}_2\text{Cu}_3\text{O}_x$ probed by O 1s and Cu 2p x-ray absorption spectroscopy**
N. Nücker, E. Pellegrin, P. Schweiss, E. Sohmen, J. Fink, S.L. Molodtsov,
C.T. Simmons, M. Domke, G. Kaindl, W. Frentrop, C. T. Chen, A. Erb, G. Müller-Vogt
Synth. Metals 71 (1995) 1563
- 33) **Fermi surfaces of High-Tc superconductors by positron 2D-ACAR**
A. A. Manuel, A. Shukla, L. Hofmann, T. Jarlborg, B. Barbiellini, S. Massidda,
W. Sadowski, E. Walker, A. Erb, M. Peter
J. Phys. Chem. Solids Vol. 56 No. 12 (1995) 1951

- 32) **Direct Vortex Lattice Imaging and Tunneling Spectroscopy of Flux Lines on $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$**
I. Maggio-Aprile, Ch. Renner, A. Erb, E. Walker, P. Fischer
Phys. Rev. Lett. 75 No. 14 (1995) 2754
- 31) **Evidence for chain superconductivity in near-stoichiometric $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ single crystals**
V. Breit, P. Schweiss, R. Hauff, H. Wühl, H. Claus, H. Rietschel, A. Erb, G. Müller-Vogt
Phys. Rev. B 52 No. 22 (1995) 15727
- 30) **BaZrO_3 : the solution for the crucible corrosion problem during the single crystal growth of high- T_c superconductors $\text{REBa}_2\text{Cu}_3\text{O}_{7-x}$; RE =Y, Pr**
A. Erb, E. Walker, R. Flükiger
Physica C 245 (1995) 245-251
- 29) **Peak effect and scaling of irreversible properties in untwinned Y-Ba-Cu-O crystals**
L. Klein, E. R. Yacoby, Y. Yeshurun, A. Erb, G. Müller-Vogt, V. Breit, H. Wühl,
Phys. Rev. B 49 No. 6 (1994), 4403
- 28) **Microstructure Influence on the Field Dependence of the Pinning Force Volume Density of YBCO Single Crystals**
R. Hergt, R. Hiergeist, A. Köhler, M. Zeisberger, A. Erb
Physica C 235-240 (1994), 2751
- 27) **Analysis of the Bulk Pinning in YBCO Single Crystals within the Frame of the Collective Pinning Theory**
R. Hiergeist, R. Hergt, A. Erb, H. G. Schnack, R. Griessen
Physica C 235-240 (1994), 2743
- 26) **$\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ - BaCuO_2 - CuO ; Investigations on the phase diagram and growth of single crystals; Part II**
A. Erb, T. Traulsen, G. Müller-Vogt,
J. Crystal Growth 137 (1994) 487-492
- 25) **Static and dynamic Displacements in $\text{REBa}_2\text{Cu}_3\text{O}_{7-x}$ (RE=Y, Ho; x=0.05,0.5); a neutron diffraction study on single crystals**
P. Schweiß, W. Reichardt, M. Braden, G. Collin, G. Heger, H. Claus, A. Erb
Phys. Rev. B 49 No.2 (1994), 1387
- 24) **Observation of the Wohleben Effect in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Single Crystals**
S. Riedling, G. Bräuchle, H. Claus, R. Lucht, K. Röhberg, H.v. Löhneysen, A. Erb,
G. Müller-Vogt
Phys. Rev. B 49 No.18 (1994), 13283

- 23) **Ordering of chain oxygen in $\text{YBa}_2\text{Cu}_3\text{O}_x$. Optical investigations on single-domain crystals**
K. Widder, A. Zibold, M. Merz, H. P. Gesserich, A. Erb, G. Müller-Vogt
Physica C 232 (1994), 82
- 22) **Ordering of Chain Oxygen in Single-Domain Crystals of YBCO**
A. Zibold, K. Widder, M. Merz, H. P. Gesserich, A. Erb, G. Müller-Vogt, J. Kirchner,
Physica C 235-240 (1994), 1093
- 21) **Superconductivity of overdoped $\text{YBa}_2\text{Cu}_3\text{O}_x$ single crystals near $x = 7$**
R. Hauff, V. Breit, H. Claus, D. Hermann, A. Knierim, P. Schweiss, H. Wühl, A. Erb,
G. Müller-Vogt
Physica C 235-240 (1994), 1953
- 20) **Anharmonicity and Electron-Phonon Coupling in Cuprate Superconductors Studied by Inelastic Neutron Scattering**
W. Reichardt, L. Pintschovius, N. Pyka, P. Schweiss, A. Erb, P. Bourges, G. Collin, J. Rossat-Mignod, I.Y. Henry, A. S. Ivanov, N. L. Mitrofanov, A. Yu. Rumiantsev,
J. of Supercond. 7 No. 2 (1994), 399
- 19) **$\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ - BaCuO_2 - CuO ; Investigations on the phase diagram and growth of single crystals, Part 1- The System BaCuO_2 - CuO_x**
A. Erb, T. Biernath, G. Müller-Vogt,
J. Crystal Growth 132 (1993) 389-395
- 18) **Uniaxial Pressure dependence of T_c of untwinned $\text{YBa}_2\text{Cu}_3\text{O}_x$ single crystals for $x = 6.5 - 7$**
O.Kraut, C.Meingast, G.Bräuchle, H. Claus, A. Erb, G.Müller-Vogt, H.Wühl
Physica C 205 (1993), 139-146
- 17) **Effect of gold impurities on the superconducting fluctuations and the upper critical field of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ single crystals**
U. Welp, S. Flesher, W.K. Kwok, J. Downey, G.W. Crabtree, H. Claus, A. Erb, G. Müller-Vogt
Phys. Rev. B 47 No. 18 (1993), 12369
- 16) **Optical Investigation of the metal-insulator regime in single-domain crystals of $\text{YBa}_2\text{Cu}_3\text{O}_x$**
A. Zibold, L. Widder, H.P. Gesserich, G.Bräuchle, H.Claus, H.v. Löhneysen,
N. Nücker, A. Erb, G. Müller-Vogt
Physica C 212 (1993), 365-371
- 15) **Neutron Scattering Study of the Chain Oxygen Vibrations in $\text{YBa}_2\text{Cu}_3\text{O}_7$**
N. Pyka, W. Reichardt, L. Pintschovius, P. Schweiß, A. Erb, G. Müller-Vogt
Phys. Rev. B 48 No.10 (1993), 7746.

- 14) **Structural anomalies in the oxygen sublattice of $\text{YBa}_2\text{Cu}_3\text{O}_7$ and $\text{EuBa}_2\text{Cu}_3\text{O}_7$ at T.**
J. Rimmel, O. Meyer, J. Geerk, J. Reiner, G. Linker, A. Erb, G. Müller-Vogt
Phys. Rev. B 48 No.21 (1993), 16168
- 13) **Influence of the Oxygen Content on the Optical Conductivity Function of $\text{YBa}_2\text{Cu}_3\text{O}_x$ ($6 < x < 7$)**
M. Dürrler, A. Zibold, K. Widder, H. P. Gesserich, Th. Wolf, G. Roth, G. Bräuchle, A. Erb, G. Müller-Vogt und J. Kirchner
Electronic Properties of High-Tc Superconductors,
Springer series in Solid State Sciences 113, 326-329
- 12) **Angular Dependence of Creep in YBCO single crystals investigated by Torque Magnetometry**
R. Hergt, R. Hiergeist, A. Erb
J. of Alloys and Compounds 195 (1993), 431-434.
- 11) **Point-contact spectroscopy on oxygen-deficient $\text{YBa}_2\text{Cu}_3\text{O}_7$ single crystals**
G. Goll, K. Seemann, G. Bräuchle, H. v. Löhneysen, A. Erb, G. Müller-Vogt, A.I. Akimenko, I.K. Yanson
Sov. J. of Low Temp. Phys. 18 (6) (1992), 415
- 10) **Hole states in CuO_2 planes and Cu-O chains of $\text{YBa}_2\text{Cu}_3\text{O}_7$ and $\text{YBa}_2\text{Cu}_4\text{O}_8$ probed by soft-x-ray absorption spectroscopy**
A. Krol, Z.H. Ming, Y.H. Kao, N. Nücker, G. Roth, J. Fink, G.C. Smith, K.T. Park, J. Yu, A.J. Freeman, A. Erb, G. Müller-Vogt, J. Karpinski, E. Kaldis, K. Schönmann
Phys. Rev. B Vol. 45 No. 5 (1992), 2581-2584
- 9) **Far-Infrared Hopping Conductivity in the CuO Chains of a Single Domain $\text{YBa}_2\text{Cu}_3\text{O}_7$ Crystal**
J. Schützmann, B. Gorshunov, K.F. Renk, J. Münzel, A. Zibold, H.P. Gesserich, A. Erb, G. Müller-Vogt
Phys. Rev. B 46 (1992), 512-515.
- 8) **The "90 K-Plateau" of Oxygen Deficient $\text{YBa}_2\text{Cu}_3\text{O}_7$ Single Crystals**
H. Claus, M. Braun, A. Erb, K. Röhberger, B. Runtsch, H. Wühl, G. Bräuchle, P. Schweiß, G. Müller-Vogt, H. v. Löhneysen
Physica C 198 (1992), 42-46
- 7) **Optical Anisotropy of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Films on $\text{NdGaO}_3(001)$ Substrates - A Comparison with single Domain crystals**
A. Zibold, K. Widder, H.P. Gesserich, T. Scherer, P. Marienhoff, M. Neuhaus, W. Jutzi, A. Erb, G. Müller-Vogt
Appl. Phys. Lett. 61 (3) (1992), 345-347.

- 6) **Phase Separation in YBa₂Cu₃O_{7-x} Single Crystals near x=0**
H. Claus, U. Gebhard, G. Linker, K. Röhberg, S. Riedling, J. Franz, T. Ishida, A. Erb, G. Müller-Vogt, H. Wühl
Physica C 200 (1992), 271-276.
- 5) **Effect of oxygen disorder on the superconductivity-induced self-energy effects in impurity-free YBa₂Cu₃O_{7-x}**
V.G. Hadjiev, C. Thomsen, A. Erb, G. Müller-Vogt, M.R. Koblischka, M. Cardona
Solid State Communications 80 Nr.8 (1991), 643-647
- 4) **Large a-b Anisotropy of the Expansivity Anomaly at T_c in Untwinned YBa₂Cu₃O_{7-x}**
C. Meingast, O. Kraut, T. Wolf, H. Wühl, A. Erb, G. Müller-Vogt
Phys. Rev. Lett. 67 Nr.12 (1991), 1634-1637
- 3) **Influence of Oxygen Deficiency on the Superconducting Properties of YBa₂Cu₃O_{7-x}**
H. Wühl, R. Benischke, M. Braun, B. Frank, O. Kraut, R. Ahrens, G. Bräuchle, H. Claus, A. Erb, W. H. Fietz, C. Meingast, G. Müller-Vogt, T. Wolf,
Physica C 185-189 (1991), 755-756.
- 2) **Piezo-Modulation Spectroscopy On Untwinned YBa₂Cu₃O₇ Crystals**
J. Winkelhahn, A. Devenyi, G. Scheiber, H.P. Geserich, A. Erb, G. Müller-Vogt
Rev. Roum. Phys 36 Nr. 10 (1991), 709-716.
- 1) **Polarized Reflectance Spectra of a (001) Surface of YBa₂Cu₃O₇ before and after detwinning**
A. Zibold, M. Dürbler, H. P. Geserich, A. Erb, G. Müller-Vogt,
Physica C 171 (1990), 151-155